



July 10, 2004

Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

**Re: Sauget Sites Area I - January 21, 1999 Administrative Order by Consent (AOC)
Monthly Report June 1 – June 30, 2004**

Dear Mr. Fayoumi,

Enclosed is the Sauget Sites Area I Monthly Report for the June 2004 reporting period. This submittal is in fulfillment of the monthly requirements of Section 2.4 Reporting, of the January 21, 1999 Final Administrative Order by Consent for Sauget Sites Area I, Sauget and Cahokia, Illinois.

Sincerely,

Bruce S. Yare for

Steven D. Smith

cc: Kevin Turner – USEPA
Tim Gouger - USACE
Sandra Bron - IEPA
Dave Webb - IDPH
Mike Coffey - USF&W
Richard Williams - Solutia
Cathleen Bumb - Solutia
Mayor Frank Bergman - Cahokia, IL
Village of Sauget - c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor R. Sauget - Sauget, IL
L. Glen Kurowski - Monsanto

Sauget Sites Area I - Sauget, Illinois

AOC - EECA / RIFS

Status Report

Date of Report: July 10, 2004
Period Covered: June 1, 2004 - June 30, 2004

Work Performed during the Reporting Period

Borrow Pit Lake

No work was performed on the Borrow Pit Lake during the reporting period.

Dead Creek

No work performed during the reporting period.

DNAPL Investigation

The final DNAPL Investigation Work Plan was submitted to the Agencies on April 20, 2004. The schedule for completion of the study was discussed at a meeting with the Agencies on April 20, 2004. At that meeting, it was agreed that field work for the investigation would begin during the week of May 7, 2004. It was also pointed out that the schedule contained in the approved Work Plan envisaged the investigation taking 6 months to complete. Thus, the June 23, 2004 completion date contained in the conditional approval letter could not be realized and an extension would almost certainly be necessary. In a letter dated May 3, 2004, a schedule extension to October 29, 2004 was requested, based on starting the investigation during the week of May 3, 2004. Subsequent to that letter, a series of discussions was held with the Agency about the advisability of delaying the start of Task 4, the installation of additional piezometers, until the preliminary results of the geophysical survey were available. Based on these discussions, the Agency approved a schedule revision on June 2, 2004 that would permit this. A revised schedule was submitted to EPA for approval on June 4, 2004 and that new schedule was approved on June 18, 2004. The new schedule shows the completion of the DNAPL investigation and submission of a report on December 17, 2004.

Field work began on Task 2 of the Work Plan on May 10, 2004. This task required the surveying of approximately 57 existing wells for the presence of NAPL and, if detected, the sampling of any such material. Of the original 57 wells designated for inspection and

survey, 54 were found to be usable. One well had been destroyed and two wells were damaged to the extent that downhole tools could not be used in the wells.

Non aqueous phase liquids were detected in three of the 54 wells, as follows:

- **EE-11:** This well, which is on the north side of Site G, was measured on May 17th and found to contain a dark brown LNAPL. The LNAPL appeared to a petroleum substance, based on color and odor. The initial depth to LNAPL was about 14.4 feet below top of casing, and the total depth of the well was measured at 23.1 feet below top of casing. Fluid levels in EE-11 were re-measured the following afternoon (May 20th) after the well was bailed down on May 19th, and at that time EE-11 was observed to have a layer of LNAPL approximately 0.2 feet thick. A total of approximately 1/4 cup of LNAPL (0.02 gallons) was removed from EE-11 during a NAPL recovery test on May 20th. Additional fluid level measurements were obtained in this well on June 28th. No measurable LNAPL recovery was observed.
- **BR-G:** The bedrock well at Site G had some evidence of the presence of DNAPL. Dark brown spots and minor discontinuous brown staining were noted on the bottom 4 feet of a weighted cotton string lowered to the bottom of BR-G. A bailer lowered to the bottom of the well was found to have a light sheen or droplets on the surface when it was retrieved. No DNAPL was present within the bailer. A DNAPL recovery test was attempted at this location and over 5 gallons of fluids were pumped from the bottom of the well. Only water was recovered; no DNAPL was visible in the produced fluids.
- **BR-I:** The bedrock well at Site I also had some evidence of the presence of DNAPL. Dark brown spots and minor discontinuous staining were noted on the bottom 9 feet of a weighted cotton string lowered to the bottom of BR-I. A bailer lowered to the bottom of the well was found to have brown staining on the bailer surface when it was retrieved. Approximately 1/8 inch of DNAPL was observed in the bottom of the bailer. A DNAPL recovery test was attempted at this location and over 8 gallons of fluids were pumped from the bottom of the well. Only water was recovered; no DNAPL was visible in the produced fluids.

The well survey was completed on May 20, 2004.

Field activities for Task 3, the seismic reflection survey, began on June 7 and were completed on June 30. During this time, the following activities were completed:

- GPS Land Surveying: 7 days
- Collection of 3-D Seismic Reflection Data: 15 days
- Downhole "Check Shot" Surveys: 1 day

Limited clearing operations at Site G along the pathways of the seismic survey grid were necessary because the site is heavily vegetated.. The clearing operations were conducted

between June 24 and June 26. During the work, the contractor encountered two very small areas with surficial waste materials and reported this finding to Solutia. Solutia representatives inspected the areas and discussed the findings with the Agency. It was agreed that the waste materials would be sampled and that a temporary cover would be placed over the areas. The temporary cover is to consist of a synthetic membrane covered by approximately one foot of clean soil.

Based on a letter from the head geophysicist, a copy of which was submitted to the EPA on June 4, 2004, the data processing and preliminary interpretation of the bedrock surface topography will be available four weeks after receipt of all the seismic field data. This corresponds to Monday, August 2. Once that interpretation is available, a proposed piezometer installation plan will be submitted to the Agency for approval. The current schedule is based on receiving Agency approval of that plan within one week of submittal.

Attachments

There are no Technical Memoranda or data submitted with this report.

Work Scheduled for Next Reporting Period

- Sample the waste materials uncovered during the clearing operations.
- Validate the results of the analyses performed on these samples. Submit the validated results to EPA.
- Reduction and interpretation of the geophysical data.
- Preparation of a preliminary bedrock surface topography map.
- Construction of temporary covers over the two areas on Site G with surficial waste materials.

Submittal Schedule Status

The only submittal envisaged during the next reporting period is the validated results of the analyses of the waste samples obtained on Site G.